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Please find below and/or attached an Office communication concerning this application or proceeding.

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 47, 87-89, 91-95 and 97-112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Landsman, US 4,764,815 (Landsman) in view of Bergling, US 4,015,702 (Bergling).

a. Regarding claim 1:

Landsman teaches a flat bed platesetter system for imaging radiant energy onto a printing plate (col. 1, lines 7-9), the system comprising: a supporting bed (26, 28, Fig. 1); drive means for engaging the printing plate in contact with the support bed and (30, 32, Fig. 2) sliding (“slidably supported”, col. 5, line 35) the printing plate and the support bed in a direction of movement and; an optical head (12, Fig. 1) movably mounted on a stationary bridge (14, 14a, Fig. 1), adapted to move across the direction of movement of the printing plate (“moves transversely across ... the surface to be scanned”, col. 3, lines 14-15) and being provided for emitting radiant energy onto the printing plate (col. 3, lines 5-12).

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Landsman does not teach: a stationary supporting bed; drive means for sliding the printing plate on the support bed in a direction of movement.

Bergling teaches a method and apparatus for conveying flat plates, including: a stationary support bed of a plurality of rollers (2, Fig. 1; “plurality of wheels to support the plates during their transport,” col. 1, lines 65-66); a drive means (5, 6, 14, Figs. 2 and 4) for engaging the printing plate in direct contact with the stationary support bed (Fig. 2); the grippers are laterally and longitudinally adjustable (col. 3, lines 17-20).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Landsman to replace the reference and primary platens with the stationary support bed and grippers of Bergling, because Bergling teaches that such a system allows adjustability for various plate sizes, which would increase the utility of the apparatus. A person having ordinary skill in the art would also recognize the advantage of less moving mass with the gripper system of Bergling, which could lead to lower energy requirements and more precise control compared with a drive means having a larger mass.

b. Regarding claim 47:

Landsman teaches: a flat bed platesetter system for imaging radiant energy onto a printing plate (col. 1, lines 7-9), the system comprising: a supporting bed (26, 28, Fig. 1); a carriage for engaging the printing plate in direct contact with the stationary support bed and (30, 32, Fig. 2) sliding (“slidably supported”, col. 5, line 35) the printing plate and the support bed in a direction of movement and; an optical head (12, Fig. 1) movably mounted on a stationary bridge (14, 14a, Fig. 1), adapted to move across the direction of movement of the printing plate

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(“moves transversely across... the surface to be scanned”, col. 3, lines 14-15) and being provided for emitting radiant energy onto the printing plate (col. 3, lines 5-12);

Landsman does not teach: a stationary supporting bed (3, Fig. 1); a carriage (2, Fig. 1) for sliding the load on the support bed.

Bergling teaches a method and apparatus for conveying flat plates, including: a stationary support bed of a plurality of rollers (2, Fig. 1; “plurality of wheels to support the plates during their transport,” col. 1, lines 65-66); a carriage (5, 6, 14, Figs. 2 and 4) for engaging the printing plate in direct contact with the stationary support bed (Fig. 2); the grippers are laterally and longitudinally adjustable (col. 3, lines 17-20).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Landsman to replace the reference and primary platens with the stationary support bed and grippers of Bergling, because Bergling teaches that such a system allows adjustability for various plate sizes, which would increase the utility of the apparatus. A person having ordinary skill in the art would also recognize the advantage of less moving mass with the gripper system of Bergling, which could lead to lower energy requirements and more precise control over a drive means with a larger mass.

c. Regarding claim 87:

Landsman teaches: a method for imaging a printing plate with radiant energy (col. 1, lines 7-9) in a flat bed platesetter, the method comprising: (a) providing a flat bed platesetter having a support area, (b) disposing a printing plate on, and in direct contact with, the support area: (c) positioning the printing plate on the support bed in a defined and centered position; (d)

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sliding the printing plate in a first direction; and (e) moving a radiant energy emitting head in a second direction substantially perpendicular to the first direction to provide an image on the printing plate (col. 3, line 5 through col. 4, line 37).

Landsman does not teach a stationary support area, (b) disposing a printing plate in direct contact with the stationary support area.

Bergling teaches a method and apparatus for conveying flat plates, including: a stationary support bed of a plurality of rollers (2, Fig. 1); disposing a printing plate in direct contact with the stationary support area ("plurality of wheels to support the plates during their transport," col. 1, lines 65-66); the grippers (5, 6, Fig. 2) are laterally and longitudinally adjustable (col. 3, lines 17-20).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Landsman to replace the reference and primary platens with the stationary support bed and grippers of Bergling, because Bergling teaches that such a system allows adjustability for various plate sizes, which would increase the utility of the apparatus. A person having ordinary skill in the art would also recognize the advantage of less moving mass with the gripper system of Bergling, which could lead to lower energy requirements and more precise control over a drive means with a larger mass.

d. Regarding claim 88, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 1 above. Bergling also teaches wherein the stationary support bed comprises a field of roller bearings extending the length of the device (plurality of rollers 2, Fig. 2).

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e. Regarding claim 89, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 47 above. Bergling also teaches wherein the carriage is configured to hold the printing plate from underneath as the carriage slides the printing plate on the stationary support bed (grippers 5, 6 grip the top and bottom of the plate, Fig. 2).

f. Regarding claim 91, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 47 above. Bergling also teaches a carriage (5, 6, Fig. 2) that is substantially narrower than the width of the plate across the direction of movement of the printing plate (8, Fig. 2).

g. Regarding claim 92, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 87 above. Bergling also teaches a carriage (5, 6, Fig. 2) that is substantially narrower than the width of the plate across the direction of movement of the printing plate (8, Fig. 2).

h. Regarding claim 93, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 87 above. Landsman also teaches wherein the step of moving the radiant energy emitting head comprises moving an optical head, on which the radiant energy emitting head is mounted, on a stationary bridge across the direction of movement of the printing plate (col. 3, line 5 through col. 4, line 37).

i. Regarding claim 94:

Landsman teaches a platesetter system for imaging radiant energy onto a printing plate (col. 1, lines 7-9), the system comprising: a support bed (26, 28, Fig. 1) sufficiently large to

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receive and support the printing plate; a printing plate positioning means for bringing the printing plate into a defined and centered position (col. 5, ll. 58-61); drive means (30, 32, Fig. 2) for sliding the printing plate in a direction of movement; an optical head (12, Fig. 1) movably mounted on a stationary bridge (14, 14a, Fig. 1) and adapted to move across the direction of movement of the printing plate (“moves transversely across... the surface to be scanned”, col. 3, lines 14-15), the optical head being adapted to emit radiant energy onto the printing plate (col. 3, lines 5-12)

Landsman does not teach: a support bed comprising a stationary support surface to directly support the printing plate with one face of the printing plate in sliding contact with the support surface; and a plurality of bearings configured to maintain a portion of the printing plate at a predetermined distance from the optical head.

Bergling teaches a method and apparatus for conveying flat plates, including: a stationary support bed of a plurality of rollers (2, Fig. 1; “plurality of wheels to support the plates during their transport,” col. 1, lines 65-66); a drive means (5, 6, 14, Figs. 2 and 4) for engaging the printing plate in direct contact with the stationary support bed (Fig. 2); the grippers are laterally and longitudinally adjustable (col. 3, lines 17-20); the stationary support bed comprises a field of roller bearings extending the length of the device (plurality of rollers 2, Fig. 2) that maintain a portion of the printing plate at a predetermined distance from the optical head.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Landsman to replace the reference and primary platens with the stationary support bed and grippers of Bergling, because Bergling teaches that such a system

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allows adjustability for various plate sizes, which would increase the utility of the apparatus. A person having ordinary skill in the art would also recognize the advantage of less moving mass with the gripper system of Bergling, which could lead to lower energy requirements and more precise control over a drive means with a larger mass.

j. Regarding claim 95, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 94 above. Landsman also teaches where the optical head is adapted to focus the radiant energy onto a focus plane (“automatic focusing system,” col. 13, line 21). Bergling also teaches the plurality of bearings are configured to maintain the portion of the printing plate in the focus plane (“plurality of wheels to support the plates,” col. 1, lines 65-66).

k. Regarding claim 97, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 95 above. Bergling also teaches wherein the plurality of bearing compromise a plurality of rows of precision bearing and corresponding plurality of rows of pressure bearings, the rows of pressure bearings being offset from the corresponding rows of precision bearings (rows of bearings 2 are offset, Fig. 2).

l. Regarding claim 98:

Landsman teaches a platesetter system for imaging radiant energy onto a printing plate, the system comprising: a support bed (30, 32, Fig. 2) having a support field defining a support plane; a printing plate positioning means for brining the printing plate into a defined and centered position (col. 5, ll. 58-61); a carriage (26, 28, Fig. 1) movable across the support field in a direction of movement and having a holder adapted to secure the printing plate to the carriage

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and maintain the printing plate at a level and in contact with the support bed; and an optical head (12, Fig. 1) movably mounted on a stationary bridge and adapted to move across the direction of movement of the carriage, the optical head comprising emitters for emitting radiant energy onto the printing plate.

Landsman does not teach a carriage that maintains the printing plate at the level of the support plane and in direct contact with the support bed.

Bergling teaches a method and apparatus for conveying flat plates, including: a carriage (5, 6, 14, Fig. 2) that maintains the printing plate at the level of the support plane and in direct contact with the support bed (2, Fig. 1); the grippers are laterally and longitudinally adjustable (col. 3, lines 17-20).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Landsman to replace the reference and primary platens with the stationary support bed and grippers of Bergling, because Bergling teaches that such a system allows adjustability for various plate sizes, which would increase the utility of the apparatus. A person having ordinary skill in the art would also recognize the advantage of less moving mass with the gripper system of Bergling, which could lead to lower energy requirements and more precise control over a drive means with a larger mass.

m. Regarding claims 99, 103, and 107, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claims 98, 1 and 47, respectively, above. Bergling also teaches wherein the carriage is moveable across the support field in a stepwise motion (col. 3, lines 28-47).

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n. Regarding claims 100, 104, and 108, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claims 98, 1 and 47, respectively, above. Bergling also teaches wherein the support is adapted to maintain the printing plate at a precise distance from the optical head while the carriage moves the printing plate across the support field (“plurality of wheels to support the plates,” col. 1, lines 65-66).

o. Regarding claims 101, 105, and 109, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claims 98, 1 and 47, respectively, above. Bergling also teaches wherein the support bed is adapted to maintain the printing plate flat in the support plane (“plurality of wheels to support the plates,” col. 1, lines 65-66).

p. Regarding claims 102, 106, and 110, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claims 98, 1 and 47, respectively, above. Bergling also teaches wherein the carriage is adapted to securely maintain the printing plate in a stationary position (col. 3, lines 28-47).

q. Regarding claims 111 and 111, the combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claims 1 and 47, respectively, above. Bergling also teaches a printing plate positioning means for brining the printing plate into a defined and centered position (col. 5, ll. 58-61).

3. Claim 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over Landsman in view of Bergling as applied to claim 47 above, and further in view of Rinke et al., US 5,934,195 (Rinke).

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The combination of Landsman and Bergling teaches all that is claimed as discussed in the rejection of claim 47 above, including wherein the carriage (Bergling , 5, 6, 14, Fig. 2) has a base (14, Fig. 2) located under a supporting bed with sliding elements (2, Fig. 1).

The combination of Landsman and Bergling does not teach a protruding section carrying suction cups and disposing the suction cups at the level where the printing plate is in direct contact with the stationary support bed.

Rinke teaches an apparatus for and method of exposing printing plates that uses a vacuum platen to secure the printing plate (col. 5, lines 6-32).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to further modify Landsman to use a vacuum to secure the plate to the carriage, because a person having ordinary skill in the art would recognize that a vacuum gripper system would grip the plate exclusively from the bottom, removing any part of the gripping element from the top surface of the plate, and therefore allowing the whole top surface of the plate to be available for radiating by the optical head.

Response to Arguments

4. Applicant's arguments filed 25 May 2005 have been fully considered but they are not persuasive.

5. In response to applicant's arguments on p. 8 that there is no disclosure in any of the references that teach or suggest positioning a printing plate in a defined and centered position, Landsman teaches accurately locating the media to be scanned within the scanning area of the platen (col. 5, l. 58-61).

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6. In response to applicant's generic argument on p. 9 that there is no suggestion to combine the Landsman and Bergling, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, a person having ordinary skill in the art would recognize the advantages of reduced power consumption from reducing the mass of the plate movement mechanism. A person having ordinary skill in the art would recognize, for example, that reducing the required power consumption would lead to advantages like smaller motors and a more compact apparatus, as well as reduced power consumption which would decrease the operating cost of the machine.

7. In response to applicant's argument on p. 9 that Bergling is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Bergling is in the field of applicant's endeavor, the field of moving large plates on a conveyor. Additionally, Bergling is reasonably pertinent to the particular problem with which the applicant is concerned, that of moving large plates on a conveyor with reduced inertia of the movement mechanism.

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Allowable Subject Matter

8. Claims 83-84, 90, and 96 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. Claims 85-86 are allowed.
10. Reasons for allowance for claims 83-86 can be found in the office action of 05 February 2003.
11. Reasons for allowance for claims 90 and 96 can be found in the office action of 14 July 2004.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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